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Amendment
Attorney Docket No. S63.2B-10062-US01

Remarks

This Amendment after Final is in response to the Final Office Action dated September 10, 2004.

The applicant traverses the continued indefiniteness rejection of claim 1-13, 15-27 and 29-34.

The Examiner proposes that "reaction product" would be more appropriate than "melt mixture product." The proposal has been followed for the product. The term "melt mixture" has been retained as the precursor to the reaction product. It will be understood that the term "reaction product" is directed to the product of the melt mixture, regardless of whether some unreacted starting components are also present.

In this case we want to reflect that the relevant melt mixture occurred in a specific relationship to the present tense time frame. Claim 1 does not encompass compositions that may have been products of melt mixtures that themselves have been remelted. The feature the applicant is seeking to exploit is the ability to extend the polymer in the last melt - so that the chain extended polymer does not have to be reprocessed in a melt after the chain extension reaction. That is why the composition is the reaction product of the defined melt mixture event.

The replacement of "a" with "the" in claims 1, 17 and 29 is seen to be proper as a given melt mixture produces a singular product so no "a" is needed to introduce the reaction product. The use of the term "a" appears to have permitted confusion with a product produced at a different time in the history of the polymer composition. Again, the claim is referring to the reaction product of the last melt event, not a melt event that occurred in some earlier time.

In the course of preparing the amendments described above it was noticed that the component amounts in claims 8, 13, 16, 22, 26, 27 and 32 should refer to the mixture, not the reaction product. It was also noted that there were two claims numbered 32 and two claims numbered 33 in the previous claim set. These errors have also been corrected herein.

In view of the foregoing amendments withdrawal of the indefiniteness rejections is requested.

Claims 1-13, 15-27 and 29-34, have been rejected as obvious from Chen et al (US

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5,554,120) in view of Loontjens et al (US 6,228,980). This rejection is also traversed on the grounds, previously stated, that Chen et al does not use chain extenders.

The Examiner questions the applicant's support for this assertion. The support is clear from the review of Chen et al. The examples of Chen et al describe the polymer melt composition from which a medical device has been formed. No chain extender component is used.

To the extent the Examiner is asserting that a polymer component may have been chain extended before it was incorporated in to the Chen et al compositions, such a possibility is pure speculation and cannot be used as a basis to reject the claims at issue. Moreover, even if such a prior chain extension had occurred, it would be irrelevant to the claims of this application.

The claims are describing the polymer composition from which the device is formed. Polymer compositions of thermoplastic polymers change with successive remelts. Therefore the polymer composition from which the device is formed is provided by the most recent melt. In the case of Chen et al's we know what the components of the most recent melt mixture are. Those components are described in the specification generally and illustrated in the Examples. Chen et al do not put a chain extender in the compositions of the Examples and do not suggest doing so elsewhere in the specification.

The timing of the melt that produces the reaction product is believed to be important to both the process and to the final product. If a chain extender is used before the most recent melt, the molecular weight extension will already be reflected in the material that is melted and pumped when the device is formed. The problem of increased melt viscosity that accompanies higher molecular weight polymers is present from the start of the melt. In the case where a chain extension happens in the last melt, however, the polymer molecular weight increase occurs during the melt processing. There will be a lag time during which a lower viscosity is present, so there is less stress on the pumping equipment and a higher final molecular weight can be processed through the equipment into the final article.

Since the claim pertains to the reaction product of the most recent melt and Chen et al does not suggest using a chain extender, use of a polymer modified with a Loontjens chain extender in Chen et al's compositions does not meet the claim. At least for that reason the invention is not obvious. Withdrawal of the rejection is respectfully requested.

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Conclusion

The application has been amended to remove the grounds for the indefiniteness rejection and the claim as clarified herein is not directed to the subject matter asserted to be obvious. The application is therefore believed to be in condition for allowance. Early and favorable action thereon is requested.

Respectfully submitted,

VIDAS, ARRETT & STEINKRAUS

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By: 

Walter J. Steinkraus

Registration No.: 29592

6109 Blue Circle Drive, Suite 2000
Minnetonka, MN 55343-9185
Telephone: (952) 563-3000
Facsimile: (952) 563-3001
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